IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method of describing object region data about an object in [[a]] video ~~over a plurality of~~ data including frames arranged in a frame advancing direction, the method comprising:

extracting an object from each of the frames;

approximating the object of each of the frames using one of predetermined figures defined by representative points ~~for each of the frames~~;

extracting the representative points of the figure for each of the frames, one of the representative points in each frame being a reference point represented by a coordinate value and ~~one of the~~ remaining representative points in each of the frames being represented by ~~a relative position data~~ vectors with reference to ~~the reference point~~ other representative points;

approximating a first trajectory with a first function, the first trajectory being obtained by arranging, in the ~~frames~~ frame advancing direction, position data about the coordinate value of the reference point;

approximating [[a]] second ~~trajectory~~ trajectories with [[a]] second ~~function~~ functions, each of the second ~~trajectory~~ trajectories being obtained by arranging, in the ~~frames~~ frame advancing direction, the ~~relative position data about the one~~ vectors of the remaining representative points ~~with reference to the reference point~~; and

describing the object region data using the first and second functions.

Claim 2 (Original): The method according to claim 1, wherein said object region data comprises information representing a range of frames in which the object exists in the video data and information identifying the figure approximating the object region.

Claim 3 (Original): The method according to claim 1, wherein said object region data comprises one of information representing related information linking to the object and information representing a method of accessing the related information.

Claim 4 (Previously Presented): The method according to claim 1, wherein said relative position data are components of differential vectors between the one of the representative points and remaining of the representative points.

Claim 5 (Original): The method according to claim 1, wherein said object region data comprises parameters of the functions.

Claim 6 (Currently Amended): A method of describing object region data about an object in video data ~~over a plurality of~~ including frames <u>arranged in a frame advancing direction, the frames including a reference frame and remaining frames</u>, the method comprising:

extracting an object from each of the frames;

approximating the object of each of the frames using one of predetermined figures defined by representative points ~~for each of the frames~~;

extracting the representative points of the figure for each of the frames, one of the representative points <u>in the reference frame</u> being a reference point represented by a coordinate value and ~~one of the~~ remaining representative points being represented by a ~~relative position data~~ <u>vectors</u> with reference to ~~the reference point~~ <u>other representative points, and the representative points in the remaining frames being represented by vectors with reference to corresponding representative points in a preceding frame</u>;

approximating ~~a first trajectory~~ trajectories with ~~a first function~~ functions, each of the ~~first trajectory~~ trajectories being obtained by arranging, in the ~~frames~~ frame advancing direction, ~~position data about the reference point~~ vectors of the representative points; and

~~approximating a second trajectory with a second function, the second trajectory being~~ ~~obtained by arranging, in the frames advancing direction, the relative position data about the~~ ~~one of the remaining points with reference to the reference point; and~~

describing the object region data using the ~~first and second~~ functions.

Claim 7 (Original): The method according to claim 6, wherein said object region data comprises information representing a range of frames in which the object exists in the video data and information identifying the figure approximating the object region.

Claim 8 (Original): The method according to claim 6, wherein said object region data comprises one of information representing related information linking to the object and information representing a method of accessing the related information.

Claim 9 (Previously Presented): The method according to claim 6, wherein said relative position data are components of differential vectors between the representative points in the predetermined frame and the representative points in the succeeding frame.

Claim 10 (Original): The method according to claim 6, wherein said object region data comprises parameters of the functions.

Claim 11 (Currently Amended): A method of describing object region data about an object in video data ~~over a plurality of~~ including frames <u>arranged in a frame advancing direction</u>, the method comprising:

extracting an object from each of the frames;

approximating the object of each of the frames using one of predetermined figures defined by representative points ~~for each of the frames~~;

extracting the representative points of the figure for each of the frames, one of the representative points <u>in each frame</u> being a reference point represented by a coordinate value and ~~one of the~~ remaining representative points <u>in each of the frames</u> being represented by ~~a~~ ~~relative position data~~ <u>vectors</u> with reference to ~~the reference point~~ <u>other representative points</u>;

approximating a first trajectory with a first function, the first trajectory being obtained by arranging, in the ~~frames~~ <u>frame</u> advancing direction, data indicating a position of <u>the coordinate value of</u> the reference point;

approximating [[a]] second ~~trajectory~~ <u>trajectories</u> with [[a]] second ~~function~~ <u>functions</u>, <u>each of</u> the second ~~trajectory~~ <u>trajectories</u> being obtained by arranging, in the ~~frames~~ <u>frame</u> advancing direction, the ~~relative position data about the one~~ <u>vectors</u> of the remaining <u>representative</u> points ~~with reference to the reference point~~; and

describing the object region data using the first and second functions and depth information of the object.

Claim 12 (Original): The method according to claim 11, wherein said object region data comprises information representing a range of frames in which the object exists in the video data and information identifying the figure approximating the object region.

Claim 13 (Original): The method according to claim 11, wherein said object region data comprises one of information representing related information linking to the object and information representing a method of accessing the related information.

Claim 14 (Original): The method according to claim 11, wherein said object region data is described by using the depth information of the object and parameters of the functions.

Claim 15 (Original): The method according to claim 11, wherein said depth information is a relative depth and has a discrete level value.

Claim 16 (Currently Amended): A method of describing object region data about an object in video data ~~over a plurality of~~ including frames <u>arranged in a frame advancing direction</u>, the method comprising:

extracting an object from each of the frames;

approximating the object of each of the frames using one of predetermined figures defined by representative points ~~for each of the frames~~;

extracting the representative points of the figure for each of the frames, one of the representative points <u>in each frame</u> being a reference point represented by a coordinate value and ~~one of the~~ remaining representative points <u>in each of the frames</u> being represented by ~~a relative position data~~ <u>vectors</u> with reference to ~~the reference point~~ <u>other representative parts</u>;

approximating a first trajectory with a first function, the first trajectory being obtained by arranging, in the ~~frames~~ <u>frame</u> advancing direction, data indicating a position of <u>the coordinate value of</u> the reference point;

approximating [[a]] second ~~trajectory~~ <u>trajectories</u> with [[a]] second ~~function~~ <u>functions</u>, each of the second ~~trajectory~~ <u>trajectories</u> being obtained by arranging, in the ~~frames~~ <u>frame</u>

advancing direction, the ~~relative position data about the one~~ _vectors_ of the remaining

representative points ~~with reference to the reference point~~; and

describing the object region data using the first and second functions and display flag

information indicating a range of frames in which the object or each of the representative

points is visible or not.

Claim 17 (Original): The method according to claim 16, wherein said object region

data comprises information representing a range of frames in which the object exists in the

video data and information identifying the figure approximating the object region.

Claim 18 (Original): The method according to claim 16, wherein said object region

data comprises one of information representing related information linking to the object and

information representing a method of accessing the related information.

Claim 19 (Original): The method according to claim 16, wherein said object region

data is described by using the display flag information and parameters of the functions.

Claim 20 (Currently Amended): A method of describing object region data about an

object in video data ~~over a plurality of~~ _including_ frames _arranged in a frame advancing_

direction, the method comprising:

extracting an object from each of the frames;

approximating the object of each of the frames using one of predetermined figures

defined by representative points ~~for each of the frames~~;

extracting the representative points of the figure for each of the frames, one of the

representative points _in each frame_ being a reference point represented by a coordinate value

and ~~one of the~~ remaining representative points <u>in each of the frames</u> being represented by a

relative position data with reference ~~to the reference point~~ <u>other representative points</u>;

approximating a first trajectory with a first function, the first trajectory being obtained

by arranging, in the ~~frames~~ <u>frame</u> advancing direction, data indicating a position of <u>the</u>

<u>coordinate value of</u> the reference point;

approximating [[a]] second ~~trajectory~~ <u>trajectories</u> with [[a]] second ~~function~~ <u>functions</u>,

<u>each of</u> the second ~~trajectory~~ <u>trajectories</u> being obtained by arranging, in the ~~frames~~ <u>frame</u>

advancing direction, the ~~relative position data about the one~~ <u>vectors</u> of the remaining

<u>representative</u> points ~~with reference to the reference point~~; and

describing the object region data using the first and second functions and object

passing range information indicating a range where the figure approximating the object exist

over said plurality of frames.

Claim 21 (Original): The method according to claim 20, wherein said object region

data comprises information representing a range of frames in which the object exists in the

video data and information identifying the figure approximating the object region.

Claim 22 (Original): The method according to claim 20, wherein said object region

data comprises one of information representing related information linking to the object and

information representing a method of accessing the related information.

Claim 23 (Original): The method according to claim 20, wherein said object region

data is described by using the object passing range information and parameters of the

functions.

Claim 24 (Currently Amended): A method of describing object region data about an object moving in a panorama image formed by combining a plurality of frames arranged in a frame advancing direction with being overlapped, the method comprising:

extracting an object from each of the frames;

approximating the object of each of the frames in the panorama image using one of predetermined figures defined by representative points for each of the frames;

extracting the representative points of the figure in a coordinate system of the panorama image, one of the representative points in each frame being a reference point represented by a coordinate value and one of the remaining representative points in each of the frames being represented by a relative position data vectors with reference to the reference point other representative points;

approximating a first trajectory with a first function, the first trajectory being obtained by arranging, in the frames frame advancing direction, data indicating a position of the coordinate value of the reference point;

approximating [[a]] second trajectory trajectories with [[a]] second function functions, each of the second trajectory trajectories being obtained by arranging, in the frames frame advancing direction, the relative position data about the one vectors of the remaining representative points with reference to the reference point; and

describing the object region data using the first and second functions.

Claim 25 (Original): The method according to claim 24, wherein said object region data comprises information representing a range of frames in which the object exists in the video data and information identifying the figure approximating the object region.

Claim 26 (Original): The method according to claim 24, wherein said object region data comprises one of information representing related information linking to the object and information representing a method of accessing the related information.

Claim 27 (Original): The method according to claim 24, wherein said object region data comprises parameters of the functions.

Claim 28 (Currently Amended): An article of manufacture comprising a computer usable medium having computer readable program code means embodied therein and for describing object region data about an object in video data ~~over a plurality of~~ including frames <u>arranged in a frame advancing direction</u>, the computer readable program code means comprising:

computer readable program code means for extracting an object from each of the frames;

computer readable program code means for approximating the object of each of the frames using one of predetermined figures defined by representative points ~~for each of the frames~~;

computer readable program code means for extracting the representative points of the figure for each of the frames, one of the representative points <u>in each frame</u> being a reference point represented by a coordinate value and ~~one of the~~ remaining representative points <u>in</u> <u>each of the frames</u> being represented by ~~a relative position data~~ <u>vectors</u> with reference to ~~the~~ ~~reference point~~ <u>other representative points</u>;

computer readable program code means for approximating a first trajectory with a first function, the first trajectory being obtained by arranging, in the ~~frames~~ <u>frame</u> advancing direction, ~~position data about~~ <u>the coordinate value of</u> the reference point;

computer readable program code means for approximating [[a]] second ~~trajectory~~ trajectories with [[a]] second ~~function~~ functions, each of the second ~~trajectory~~ trajectories being obtained by arranging, in the ~~frames~~ frame advancing direction, the ~~relative position data about the one~~ vectors of the remaining representative points ~~with reference to the reference point~~; and

computer readable program code means for describing the object region data using the first and second functions.

Claim 29 (Currently Amended): An article of manufacture comprising a computer usable medium having computer readable program code means embodied therein and for describing object region data about an object in video data ~~over a plurality of~~ including frames arranged in a frame advancing direction, the frames including a reference frame and remaining frames, the computer readable program code means comprising:

computer readable program code means for extracting an object from each of the frames;

computer readable program code means for approximating the object of each of the frames using one of predetermined figures defined by representative points ~~for each of the frames~~;

computer readable program code means for extracting the representative points of the figure for each of the frames, one of the representative points in the reference frame being a reference point represented by a coordinate value and ~~one of the~~ remaining representative points being represented by ~~a relative position data~~ vectors with reference to ~~the reference point~~ other representative points, and the representative points in the remaining frames being represented by vectors with reference to corresponding representative points in a preceding frame;

computer readable program code means for approximating ~~a first trajectory~~ trajectories with ~~a first function~~ functions, each of the ~~first trajectory~~ trajectories being obtained by arranging, in the ~~frames~~ frame advancing direction, ~~position data about the reference point~~ vectors of the representative points; and

~~computer readable program code means for approximating a second trajectory with a second function, the second trajectory being obtained by arranging, in the frames advancing direction, the relative position data about the one of the remaining points with reference to the reference point; and~~

computer readable program code means for describing the object region data using the ~~first and second~~ functions.

Claim 30 (Currently Amended):   An article of manufacture comprising:

computer readable program code means for extracting an object from each of ~~the~~ frames arranged in a frame advancing direction;

computer readable program code means for approximating the object of each of the frames using one of predetermined figures defined by representative points ~~for each of the frames~~;

computer readable program code means for extracting the representative points of the figure for each of the frames, one of the representative points in each frame being a reference point represented by a coordinate value and ~~one of the~~ remaining representative points in each of the frames being represented by ~~a relative position data~~ vectors with reference to ~~the reference point~~ other representative points;

computer readable program code means for approximating a first trajectory with a first function, the first trajectory being obtained by arranging, in the ~~frames~~ frame advancing direction, data indicating a position of the coordinate value of the reference point;

12

computer readable program code means for approximating [[a]] second ~~trajectory~~ trajectories with [[a]] second ~~function~~ functions, each of the second ~~trajectory~~ trajectories being obtained by arranging, in the ~~frames~~ frame advancing direction, the ~~relative position data about the one~~ vectors of the remaining representative points ~~with reference to the reference point~~; and

computer readable program code means for describing the object region data using the first and second functions and depth information of the object.

Claim 31 (Currently Amended): An article of manufacture comprising a computer usable medium having computer readable program code means embodied therein and for describing object region data about an object in video data ~~over a plurality of frames~~ including frames arranged in a frame advancing direction, the computer readable program code means comprising:

computer readable program code means for extracting an object from each of the frames;

computer readable program code means for approximating the object using one of predetermined figures defined by representative points ~~for each of the frames~~;

computer readable program code means for extracting the representative points of the figure for each of the frames, one of the representative points in each frame being a reference point represented by a coordinate value and ~~one of the~~ remaining representative points in each of the frames being represented by ~~a relative position data~~ vectors with reference to ~~the reference point~~ other representative points;

computer readable program code means for approximating a first trajectory with a first function, the first trajectory being obtained by arranging, in the ~~frames~~ frame advancing direction, ~~data indicating a position of~~ the coordinate value of the reference point;

computer readable program code means for approximating [[a]] second ~~trajectory~~ trajectories with [[a]] second ~~function~~ functions, each of the second ~~trajectory~~ trajectories being obtained by arranging, in the ~~frames~~ frame advancing direction, the ~~relative position data about the one~~ vectors of the remaining representative points ~~with reference to the reference point~~; and

computer readable program code means for describing the object region data using the first and second functions and display flag information indicating a range of frames in which the object or each of said points is visible or not.

Claim 32 (Currently Amended): An article of manufacture comprising a computer usable medium having computer readable program code means embodied therein and for describing object region data about an object in video data ~~over a plurality of~~ including frames arranged in a frame advancing direction, the computer readable program code means comprising:

computer readable program code means for extracting an object from each of the frames;

computer readable program code means for approximating the object of each of the frames using one of predetermined figures defined by representative points ~~for each of the frames~~;

computer readable program code means for extracting the representative points of the figure for each of the frames, one of the representative points in each frame being a reference point represented by a coordinate value and ~~one of the~~ remaining representative points in each of the frames being represented by ~~a relative position data~~ vectors with reference to ~~the reference point~~ other representative points;

computer readable program code means for approximating a first trajectory with a

first function, the first trajectory being obtained by arranging, in the ~~frames~~ frame advancing

direction, ~~data indicating a position of~~ the coordinate value of the reference point;

computer readable program code means for approximating [[a]] second ~~trajectory~~

trajectories with [[a]] second ~~function~~ functions, each of the second ~~trajectory~~ trajectories

being obtained by arranging, in the ~~frames~~ frame advancing direction, the ~~relative position~~

~~data about the one~~ vectors of the remaining representative points ~~with reference to the~~

~~reference point~~; and

computer readable program code means for describing the object region data using the

first and second functions and object passing range information indicating a range where the

figure approximating the object exist over said plurality of frames.

Claim 33 (Currently Amended): An article of manufacture comprising a computer

usable medium having computer readable program code means embodied therein and for

describing object region data about an object moving in a panorama image formed by

combining a plurality of frames arranged in a frame advancing direction with being

overlapped, the computer readable program code means comprising:

computer readable program code means for extracting an object from each of the

frames;

computer readable program code means for approximating the object of each of the

frames in the panorama image using one of predetermined figures defined by representative

points ~~for each of the figures~~;

computer readable program code means for extracting the representative points of the

figure in a coordinate system of the panorama image, one of the representative points in each

frame being a reference point represented by a coordinate value and ~~one of the~~ remaining

representative points <u>in each of the frames</u> being represented by ~~a relative position data~~

<u>vectors</u> with reference to ~~the reference point~~ <u>other representative points</u>;

computer readable program code means for approximating a first trajectory with a

first function, the first trajectory being obtained by arranging, in the ~~frames~~ <u>frame</u> advancing

direction, ~~data indicating a position of~~ <u>the coordinate value of</u> the reference point;

computer readable program code means for approximating [[a]] second ~~trajectory~~

<u>trajectories</u> with [[a]] second ~~function~~ <u>functions</u>, <u>each of</u> the second ~~trajectory~~ <u>trajectories</u>

being obtained by arranging, in the ~~frames~~ <u>frame</u> advancing direction, the ~~relative position~~

~~data about the one~~ <u>vectors</u> of the remaining <u>representative</u> points ~~with reference to the~~

~~reference point~~; and

computer readable program code means for describing the object region data using the

first and second functions.

Claim 34 (Currently Amended): A computer data signal embodied in a carrier wave,

the computer data signal capable of describing object region data about an object in video

data ~~over a plurality of~~ <u>including</u> frames <u>arranged in a frame advancing direction</u>, the

computer data signal comprising:

computer readable program code means for extracting an object from each of the

frames;

program code portion for causing a computer to approximate the object of each of the

frames using one of predetermined figures defined by representative points ~~for each of the~~

~~frames~~;

program code portion for causing a computer to extract the representative points of

the figure for each of the frames, one of the representative points <u>in each frame</u> being a

reference point represented by a coordinate value and ~~one of the~~ remaining representative

points in each of the frames being represented by ~~a relative position data~~ vectors with

reference to ~~the reference point~~ other representative points;

program code portion for causing a computer to approximate a first trajectory with a

first function, the first trajectory being obtained by arranging, in the ~~frames~~ frame advancing

direction, position data about the reference point and relative position data about the

remaining representative points with reference to the coordinate value of the reference point;

computer readable program code means for approximating [[a]] second ~~trajectory~~

trajectories with [[a]] second ~~function~~ functions, each of the second ~~trajectory~~ trajectories

being obtained by arranging, in the ~~frames~~ frame advancing direction, the ~~relative position~~

~~data about the one~~ vectors of the remaining representative points ~~with reference to the~~

~~reference point~~; and

program code portion for causing a computer to describe the object region data using

the first and second functions.

Claim 35 (Currently Amended): A computer data signal embodied in a carrier wave,

the computer data signal capable of describing object region data about an object in video

data ~~over a plurality of~~ including frames arranged in a frame advancing direction, the

computer data signal comprising:

computer readable program code means for extracting an object from each of the

frames;

program code portion for causing a computer to approximate the object of each of the

frames using one of predetermined figures defined by representative points ~~for each of the~~

~~frames~~;

program code portion for causing a computer to extract the representative points of

the figure for each of the frames, one of the representative points being a reference point in

each frame represented by a coordinate value and ~~one of the~~ remaining representative points
in each of the frames being represented by ~~a relative position data~~ vectors with reference to
~~the reference point~~ other representative points;

program code portion for causing a computer to approximate a first trajectory with a
first function, the first trajectory being obtained by arranging, in the ~~frames~~ frame advancing
direction, position data about the reference point in a reference frame and relative position
data about the remaining representative points in a succeeding frame with reference to the
position data about the coordinate value of the reference point in the reference frame;

computer readable program code means for approximating [[a]] second ~~trajectory~~
trajectories with [[a]] second ~~function~~ functions, each of the second ~~trajectory~~ trajectories
being obtained by arranging, in the ~~frames~~ frame advancing direction, the ~~relative position
data about the one~~ vectors of the remaining representative points ~~with reference to the
reference point~~; and

program code portion for causing a computer to describe the object region data using
the functions.

Claim 36 (Currently Amended): A computer data signal embodied in a carrier wave,
the computer data signal capable of describing object region data about an object in video
data ~~over a plurality of~~ including frames arranged in a frame advancing direction, the
computer data signal comprising:

computer readable program code means for extracting an object from each of the
frames;

program code portion for causing a computer to approximate the object of each of the
frames using one of predetermined figures defined by representative points ~~for each of the
frames~~;

program code portion for causing a computer to extract the representative points of the figure for each of the frames, one of the representative points in each frame being a reference point represented by a coordinate value and ~~one of the~~ remaining representative points in each of the frames being represented by ~~a relative position data~~ vectors with reference to ~~the reference point~~ other representative points;

program code portion for causing a computer to approximate a first trajectory with a first function, the first trajectory being obtained by arranging, in the ~~frames~~ frame advancing direction, ~~data indicating a position of~~ the coordinate value of the reference point;

computer readable program code means for approximating [[a]] second ~~trajectory~~ trajectories with [[a]] second ~~function~~ functions, each of the second ~~trajectory~~ trajectories being obtained by arranging, in the ~~frames~~ frame advancing direction, the ~~relative position data about the one~~ vectors of the remaining representative points ~~with reference to the reference point~~; and

program code portion for causing a computer to describe the object region data using the first and second functions and depth information of the object.

Claim 37 (Currently Amended): A computer data signal embodied in a carrier wave, the computer data signal capable of describing object region data about an object in video data ~~over a plurality of~~ including frames arranged in a frame advancing direction, the computer data signal comprising:

computer readable program code means for extracting an object from each of the frames;

program code portion for causing a computer to approximate the object of each of the frames using one of predetermined figures defined by representative points ~~for each of the frames~~;

program code portion for causing a computer to extract the representative points of the figure for each of the frames, one of the representative points in each frame being a reference point represented by a coordinate value and ~~one of the~~ remaining representative points in each of the frames being represented by ~~a relative position data~~ vectors with reference to ~~the reference point~~ other representative points;

program code portion for causing a computer to approximate a first trajectory with a first function, the trajectory being obtained by arranging, in the ~~frames~~ frame advancing direction, ~~data indicating a position of~~ the coordinate value of the reference point;

computer readable program code means for approximating [[a]] second ~~trajectory~~ trajectories with [[a]] second ~~function~~ functions, each of the second ~~trajectory~~ trajectories being obtained by arranging, in the ~~frames~~ frame advancing direction, the ~~relative position data about the one~~ vectors of the remaining representative points ~~with reference to the reference point~~; and

program code portion for causing a computer to describe the object region data using the first and second functions and display flag information indicating a range of frames in which the object or each of the representative points is visible or not.

Claim 38 (Currently Amended): A computer data signal embodied in a carrier wave, the computer data signal capable of describing object region data about an object in video data ~~over a plurality of~~ including frames arranged in a frame advancing direction, the computer data signal comprising:

computer readable program code means for extracting an object from each of the frames;

program code portion for causing a computer to approximate the object of each of the frames using one of predetermined figures defined by representative points for each of the frames;

program code portion for causing a computer to extract the representative points of the figure for each of the frames, one of the representative in each frame points being a reference point represented by a coordinate value and one of the remaining representative points in each of the frames being represented by a relative position data vectors with reference to the reference point other representative points;

program code portion for causing a computer to approximate a first trajectory with a first function, the trajectory being obtained by arranging, in the frames frame advancing direction, data indicating a position of the coordinate value of the reference point;

computer readable program code means for approximating [[a]] second trajectory trajectories with [[a]] second function functions, each of the second trajectory trajectories being obtained by arranging, in the frames frame advancing direction, the relative position data about the one vectors of the remaining points with reference to the reference point; and

program code portion for causing a computer to describe the object region data using the first and second functions and object passing range information indicating a range where the figure approximating the object exist over said plurality of frames.

Claim 39 (Currently Amended): A computer data signal embodied in a carrier wave, the computer data signal capable of describing object region data about an object moving in a panorama image formed by combining a plurality of frames arranged in frame advancing direction with being overlapped, the computer data signal comprising:

computer readable program code means for extracting an object from each of the frames;

program code portion for causing a computer to approximate the object of each of the frames in the panorama image using one of predetermined figures defined by representative points ~~for each of the frames~~;

program code portion for causing a computer to extract the representative points of the figure in a coordinate system of the panorama image, one of the representative points <u>in each frame</u> being a reference point represented by a coordinate value and ~~one of the~~ remaining representative points <u>in each of the frames</u> being represented by ~~a relative position data~~ <u>vectors</u> with reference to ~~the reference point~~ <u>of the representative points</u>;

program code portion for causing a computer to approximate a first trajectory with a first function, the first trajectory being obtained by arranging, in the ~~frames~~ <u>frame</u> advancing direction, ~~data indicating a position of~~ <u>the coordinate value of</u> the reference point;

computer readable program code means for approximating [[a]] second ~~trajectory~~ <u>trajectories</u> with [[a]] second ~~function~~ <u>functions</u>, <u>each of</u> the second ~~trajectory~~ <u>trajectories</u> being obtained by arranging, in the ~~frames~~ <u>frame</u> advancing direction, the ~~relative position data about the one~~ <u>vectors</u> of the remaining <u>representative</u> points ~~with reference to the reference point~~; and

program code portion for causing a computer to describe the object region data using the first and second functions.